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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/810,427	03/29/2004	Gerald Burt Kliman	RD-28,364-3	9782

6147 7590 02/20/2007  
GENERAL ELECTRIC COMPANY  
GLOBAL RESEARCH  
PATENT DOCKET RM. BLDG. K1-4A59  
NISKAYUNA, NY 12309

EXAMINER
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CAZAN, LIVIU RADU

ART UNIT	PAPER NUMBER
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3729

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/20/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/810,427

Applicant(s)

KLIMAN ET AL.

Examiner

Livius R. Cazan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 January 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-15 and 25-33 is/are pending in the application.
- 4a) Of the above claim(s) 25-33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/04/2006</u> . | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. The amendment filed on 1/23/2007 has been fully considered and made of record. Cancellation of claims 16-24 and 34-44 and withdrawal of claims 25-33 is acknowledged. The objection to claims 12-15 has been overcome.

#### ***Claim Objections***

2. Claims 1-15 are objected to because of the following informalities: reference numbers in parentheses should be removed from the claims. Appropriate correction is required.

#### ***Claim Rejections - 35 USC § 102***

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1-3 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Mischler (US4255684 to Mischler et al.).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006. See the response to arguments below.

#### ***Claim Rejections - 35 USC § 103***

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
6. To the extent Applicant disagrees that Mischler discloses annealing the laminated stator yoke, claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Applicant's admitted prior art (APA).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Satomi (JP7336992).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Crabb (US3862492).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

9. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Heidrich (US20020149282).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below. Note that the previous Action contained a typographical error, stating that claims 8-10 are unpatentable over Heidrich, rather than over Mischler in view of Heidrich. However, it is clear from the text of the rejection that Mischler is being used as a primary reference and Heidrich as the secondary reference.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler in view of Kilman (US6274962).

The rejection is maintained as presented in the Office Action mailed on 9/5/2006.

See the response to arguments below.

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11. Claims 12-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mischler and Kilman as applied to claim 11, in view of Heidrich.

The rejection is maintained as presented in the Office Action mailed on 9/5/2006. See the response to arguments below.

***Response to Arguments***

12. Applicant's arguments filed 1/23/2007 have been fully considered but they are not persuasive.

Applicant's main argument (see pages 8 and 9) is that Mischler does not disclose teeth, but rather legs, which, according to Applicant, do not correspond to the claimed teeth due to their different construction. Moreover, Applicant argues that Mischler does not directly mold the tooth tips onto these legs, but rather they are molded and then mounted on the legs so as to hold together the flat strips that make up the core. Both of these arguments are incorrect. The claims are not directed to the particular structure of the teeth. Both the legs of Mischler and Applicant's teeth serve the same purpose in an electrical machine, i.e. they are the stator poles (see col. 1, ln. 57 of Mischler). The claims do not presently include any of the structural differences argued by the Applicant, and therefore the rejection is maintained. Moreover, the composite tooth tips of Mischler are directly molded onto the tooth tips. In col. 2, lns. 64-68, Mischler states "Amorphous composite pole pieces 18 and 19, after insertion of the windings, *are molded onto* and hold together the assembly and contacting pairs of core straight legs." Also see col. 3, lns. 17-30.

Applicant also argues that Mischler does not disclose positioning pre-wound stator windings around respective teeth of a laminated stator yoke and directly molding composite tooth tips in contact with respective teeth of the laminated stator yoke. In col. 1, Ins. 57-62, Mischler states "A concentrated stator winding, which can be a separately wound coil, is inserted onto each pole, and a molded composite pole piece with a curved air gap surface is mounted on and holds together every contacting pair of core straight legs." As discussed above, the pole pieces are mounted by directly molding onto the pole piece.

Regarding the rejections under 35 U.S.C. 103(a), Applicant argues that the cited references do not overcome the deficiencies of Mischler. Since Mischler does not have the deficiencies argued by the Applicant, these rejections are maintained. With respect to the rejection of claim 4, Applicant states (page 9) "Satomi, for example, teaches that poles (pole pieces) and stator teeth are distinct elements known in the art, and they cannot be interpreted to correspond with one another." However, Applicant's attention is directed to the fact that poles and pole pieces are not one and the same. The terms "pole," "leg," and "tooth" as known in the electrical machine art are interchangeable. The term "pole piece" is used by Mischler to refer to what Applicant calls "tooth tips". See col. 1, Ins. 59 and 60 of Mischler for an example which clearly differentiates the two terms.

### ***Conclusion***

13. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

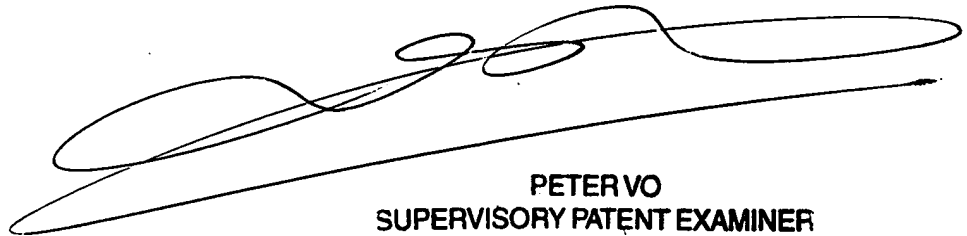
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Livius R. Cazan whose telephone number is (571) 272-8032. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on (571)272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LRC 02/05/2007

A handwritten signature in black ink, appearing to read "Peter Vo", is written over a horizontal line.

**PETER VO  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 3700**